DOCUMENT RESUME

ED 303 739 CG 021 438

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TITLE Predictors of Appraisal and Coping Dimensions in Myocardial Infarction Victims.
PUB DATE Aug 88
NOTE 13p.; Paper presented at the Annual Meeting of the American Psychological Association (96th, Atlanta, GA, August 12-16, 1988).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Coping; Demography; *Heart Disorders; *Personality Traits; *Predictor Variables; *Rehabilitation
IDENTIFIERS *Life Events

ABSTRACT

This study attempted to identify predictors of perception and coping after the occurrence of a myocardial infarction. Sixty males and 17 females who had suffered from a myocardial infarction within 3 months prior to the research were recruited from a hospital rehabilitation program. Subjects completed the Peri-Life Events Scale, the 16-PF personality inventory, a questionnaire measuring the perception of the myocardial infarction experience, and the short form of a coping measure. Multiple regression analyses were used to investigate the relationships between age, number of life events, personality perceptions of the myocardial infarction experience, personality, and coping strategies. The results suggest that personality influenced the perception of the myocardial infarction, and that coping strategies were affected by personality and perception of the myocardial infarction. The perception of the myocardial infarction experience and coping strategy were influenced by the number of life events experienced. Age was a poor predictor of perceptions and coping. Therefore, in explaining both the subjective perception and coping strategy of myocardial infarction patients, a number of personality variables seem to be important. References and tables are included. (NB)

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Predictors of Appraisal and Coping Dimensions in Myocardial Infarction Victims

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Presented at the Annual Meeting of the American Psychological Association
Atlanta, Georgia, 1988.

Predictors of Appraisal and Coping Dimensions in Myocardial Infarction Victims

Most psychological research has focused on variables predicting critical events such as a myocardial infarction (MI) (Eisendorfer, 1985; Theorell, 1974). Stress variables and personality or behavior patterns are established predictors of MI-vulnerability (Glass, 1977). Appraisal and coping processes are also crucial event variables in terms of the eventual rehabilitation and survival of infarct victims, since most research (Coyne & Lazarus, 1980; Rapaport & Katkim, 1972) indicates that person variables like personality and cognitive style are important in dealing with stress.

This study attempted to identify predictors of perception and coping after the occurrence of a MI. Five personality variables were seen as predicting the appraisal and coping process in MI victims: Warmth, assertiveness, imagination, insecurity and tension have all been reported as having an effect on health outcomes (Zales, 1985; Holahan & Moos, 1985; George, 1978). The number of critical events experiences also influences health changes (McLanahan & Sorensen, 1984), as do demographic variables such as age, gender, and socioeconomic status.

Methodology

Participants

Participants for this study were 77 individuals who had suffered from a myocardial infarction (MI) within three months prior to this research. They were all recruited from a rehabilitation program of a local hospital in Central Pennsylvania. Participants were composed of 60 males and 17 females. 20% of the sample were under age 50, 45% between 50 and 60 years and 35% over age 60.

Measures

Measures used in this study were as follows: The Peri-Life Events Scale (Dohrenwend, Askemasy, Krasnoff, & Dohrenwend, 1978) was used to assess the number of events experienced within a year before the MI. The 16 PF personality inventory was utilized to assess psychological personality traits, and a questionnaire measuring the perception of the MI experience was given to the MI group. A short form of the coping measure developed by Martin (1985) was used to assess seven dimensions of coping: religious reaction, problem solving, self reflection, intellectual devaluation, depressive reaction, self-blame and denial. The reliability coefficient for the short for of this questionnaire was $\alpha = .69$. Multiple regression analysis were used to investigate the relationships between age, number of life events, personality perceptions of MI experience,

personality, and coping strategies. Since little variation existed in socioeconomic status and too few of our participants were female, socioeconomic status and gender were not included in our analysis.

Results

A multiple regression analysis was undertaken to ascertain to what extent the perceptions of MI experience could be accounted for by personality, age, life events (Table 1). "Outgoing" personality related to perception and

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Table 1 about here

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restriction/expansion. Assertiveness related to perception of the MI as a threat, and imagination influenced the perceptual dimension of meaning. Insecure individuals showed low changeability, low challenge, and high threat perceptions about the MI. Individuals who had experienced a large number of life events, perceived the MI experience more as a threat.

Table 2 summarizes the influence of personality, age, life events, and perceptions of the MI on coping strategies.

Table 2 about here

The variables influencing problem-solving coping were a large number of previous life events and perceived strong family support. Individuals with the experience of many life

events were found to utilize more "self reflection". Outgoing persons showed more intellectual devaluation, that is, viewed the MI experience as not important. "Imagination" negatively influenced devaluation and depressive reactions. Also, "tension" was negatively related to depressive reactions. Individuals perceiving the MI experience as a controllable event utilized more "self-blame" and less "denial".

Discussion

From this study, it can be concluded that personality influenced the perception of the MI, and coping strategies were affected by personality and perception of the MI. Also, the perception of MI experience and coping strategy were influenced by the number of life events experienced. Age, on the other hand, was a poor predictor of perceptions and coping.

Therefore, in explaining both the subjective perception and coping strategy by MI patients, a number of personality variables seemed to be important. Our results are consistent with the approach to understanding individual differences in response to stress, which focuses on relatively static moderator variables - personality traits (Kobasa, Milker, & Maddi, 1979). There is also evidence that coping focuses on efforts to manage environmental ("stress") and internal ("perception") demands during a stressful encounter (Lazarus, 1966, 1981).

Undoubtedly, this study needs to be elaborated and at this point serves as a heuristic framework from a cognitive-behavioral perspective. With our results we cannot conclude which perception and coping strategies help MI victims to manage that event most effectively. Future research, therefore, should focus on identifying such effective coping strategies and processes.

References

Coyne, L.C. & Lazarus, R.S., (1980). Cognitive style, stress perception, and coping. In I.L. Kutash & L.B. Schlesinger (Eds.), Handbook on stress and anxiety: Contemporary knowledge, theory, and treatment. San Francisco: Jossey-Bass.

Dohrenwend, B.S., Askenasy, A.R., Krasnoff, L., & Dohrenwend, B.P., (1978). Exemplification of a method for scaling life events: The PERI Life Events Scale. Journal of Health and Social Behavior, 19, 205-229.

Eisdorfer, C. (1985). The conceptualization of stress and a model for further study. In M.R. Zales (Ed.), Stress in health and disease. New York: Brunner/Mazel.

George, L.K. (1978). The impact of personality and social status upon activity and psychological well-being. Journal of Gerontology, 33, 840-847.

Glass, D.C. (1977). Behavior patterns, stress, and coronary disease. Hillsdale, NJ: Lawrence Erlbaum.

Holahan, C.J. & Moos, R.H., (1985). Life stress and health: Personality, coping, and family support in stress resistance. Journal of Personality and Social Psychology, 49, 739-747.

Kobasa, S.C., Hilker, R.R., & Maddi, S.R., (1979). Who stays healthy under stress? Journal of Occupational Medicine. 21, 595-598.

Lazarus, R.S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.

Lazarus, R.S. (1981). The stress and coping paradigm. In C. Eisdorfer, D. Cohen, A. Kleinman, & P. Maxim (Eds.), Theoretical bases for psychopathology. New York: Spectrum.

Lehr, U. (1980). Alterszustand und altermsprozesse biographische determinanten. Zeitschrift fur Gerontologie, 13, 442-457.

Martin, P. (1985). The experience of a myocardial infarction: A crosscultural comparision. Unpublished dissertation, University of Bonn, West Germany.

McLanahan, S.S. & Sorensen, A.B. (1984, Jun.). Life events and psychological well-being: A reexamination of theoretical and methodological issues. Social Science Research, Vol. 13(2), 111-128.

Rapaport, H. & Katkin, E.S., (1972). Relationships among manifest anxiety, response to stress, and the perceptions of autonomic activity. Journal of Consulting and Clinical Psychology, 38, 219-224.

Theorell, T. (1974). Life events before and after the onset of a premature myocardial infarction. In B.S. Dohrenwend & B.P. Dohrenwend (Eds.), Stressful life events: Their nature and effects (pp. 101-117). New York: Wiley.

Thomae, H. (1968). Das Individum und seine Welt. Gottingen: Hogrefe.

Zales, M.R. (1985). Stress in health and disease. New York: Brunner/Mazel.

Table 1

Predictors of Appraisal Dimensions in Myocardial Infarction Victims[1]

	Loss/ Gain	Restriction Enhancement	Self/Other Determined	Change	Anticipation	Meaning	Family Support	Challenge	Threat
Warmth	.04	.25*	.03	-.00	.01	-.17	-.01	.04	-.01
Assertiveness	-.02	-.13	.11	-.13	.12	.01	-.01	-.07	.26*
Imagination	.01	.14	.22	.10	-.03	.23*	.01	.04	-.06
Insecurity	.00	.05	.04	-.33*	.06	.08	.22	-.33*	.49**
Tension	-.19	-.24	-.00	.25	.10	-.09	-.09	-.01	-.11
Age	.01	-.19	-.04	-.19	-.15	.03	-.16	-.11	.10
Number of Life Events	.01	-.17	-.08	-.17	.09	.19	-.06	-.09	.29*
R^2	.04	.18	.07	0.09	.10	.11	.06	.11	.24

* $p<.05$

** $p<.01$

[1]Values reflect standardized regression coefficients

Table 2

Predictors of Coping in Myocardial Infarction Victims[1]

	Religious Reaction	Problem Solving	Self-Reflection	Intellectual Devaluation	Depressive Reaction	Self Blame	Denial
Warmth	.02	.09	.17	.24*	-.04	-.20	-.12
Assertiveness	-.08	.06	.17	-.07	-.13	.21	-.06
Imagination	.00	-.16	-.09	-.24*	-.25*	-.01	-.11
Tension	-.15	-.03	-.08	.10	-.24*	.06	-.14
Age	.19	.08	.04	-.11	-.01	.11	.08
Number of Life Events	.11	.29*	.27*	.05	.06	.06	-.06
Restrictional Enhancement	-.05	-.02	.19	.22	-.20	-.09	-.16
Self/Other Determined	-.11	.09	-.01	-.06	-.07	.28*	-.30*
Family Support	-.22	-.24*	.02	.01	.13	-.05	-.03
R^2	.13	.18	.18	.20	.23	.21	.25

[1]Values reflect standarized regression coefficients